***Supplementary Material***

**Iron (II) polypyridyl complexes as anti-glioblastoma agents to overcome the blood-brain barrier and induce G2/M phase cell cycle arrest by regulating p53 and 4E-BP1 pathways**

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**Table S1.** Table of IC50 values of Fe(PIP)3SO4 towards glioma and normal cell lines

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Compounds |  |  | IC50a (μM) |  |  | SIb |
|  | U87 | U251 | C6 | HEB | CHEM5 |  |
| Fe(PIP)3SO4 | 9.35 | 4.44 | 3.54 | 36.03 | 4.68 | 3.85 |
| TMZ | 92.87 | 24.49 | 82.39 | 593.6 | 289.55 | 6.39 |

a: IC50 is represented for 50% inhibitory concentration (μM).

b: Safety index (SI) = IC50 (HEB cells)/ IC50 (U87 cells).

IC50 values of Fe(PIP)3SO4 towards gliomas (U87, U251 and C6 cells) and normal cell lines (HEB and CHEM5 cells) after incubation for 72h. Cells with blue markers represented for cancer cell lines, and cells with red markers represented for normal cell lines. Values expressed were means ± SD of triplicate.



**Figure S1**. Quantitative analysis of sub-G1 phase and G2/M phase accumulation effected by Fe(PIP)3SO4 (5, 10, 20 and 40 μM, respectively) for 36 h and sub-G1 phase & G2/M phase accumulation induced by Fe(PIP)3SO4 (20 μM) for different time on retardation and apoptotic cell death in U87 cells. Values were represented as means ± SD of triplicate. Significant difference between treatment and control group is indicated at *P*＜0.05 (\*) or *P*＜0.01 (\*\*) levels.